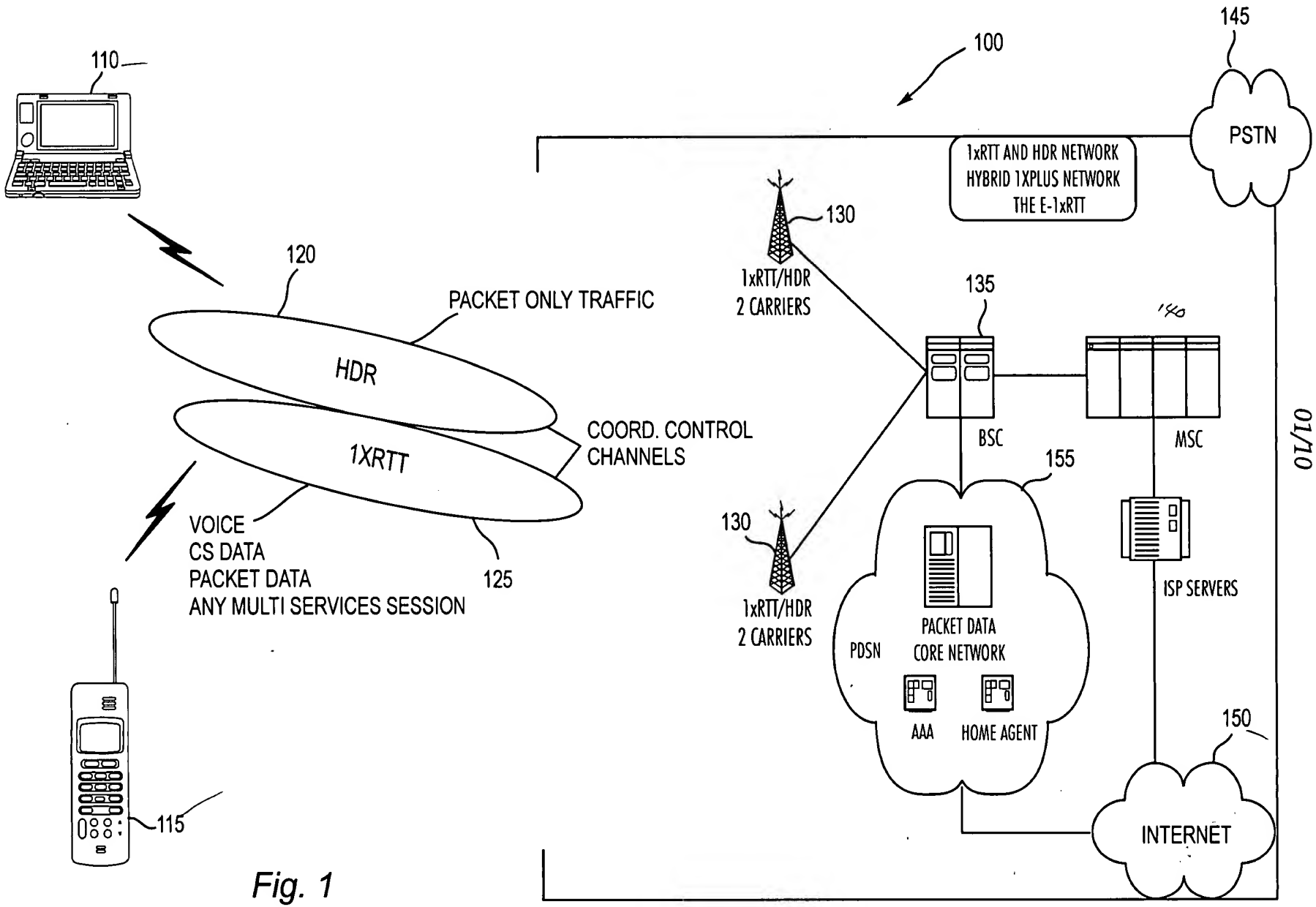

Fig. 1

APPROVED O.G. FIG.
BY
CLASS SUBCLASS
EXAMINER

01/10

APPROVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

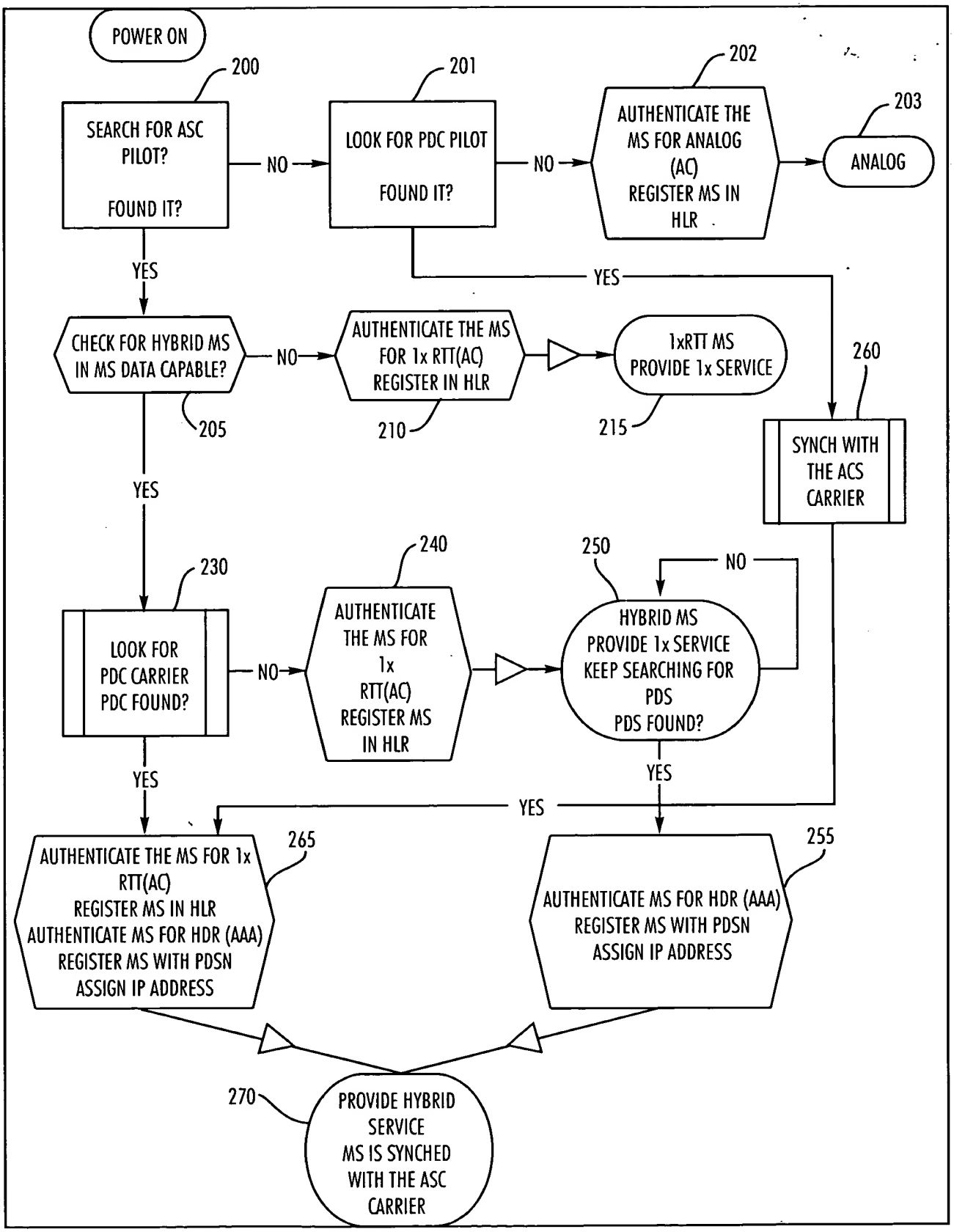

Fig. 2

CLASS 370/465

3.6 INCOMING DATA CALL IN IDLE STATE

MS is on ASC
MS has IP address
PDCN notifies BSC of call 200
BSC notifies MSC of call via A- interface 205
MSC checks COS 210
If automatic switch over is ON 215
    If is High data rate is ON
        Synch with PDC
        Switch MS to PDC
        Connect MS to PDCN → Call is ON Call Complete
        MS disconnect data call
        Synch back with ASC 220
    Else
        Use the low rate data of 1xRTT
        MS can use simultaneous data and voice
Else 225
    Send an SMS with incoming data call (Y/N)
    If MS accepts call
        Send SMS message, Would you like to use high or low data
        If high data rate is selected 230
            Synch with PDC
            Switch MS to PDC
            Connect MS to PDCN → Call is ON
            MS disconnect data call
            Synch with ASC
        Else
            Use the low rate data of 1xRTT 235
            MS can use simultaneous data and voice
    Else
        Data call is not accepted 240

Fig. 3

APPROVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

3.7 OUTGOING DATA CALL IN IDLE STATE

MS is on ASC
MS has IP address
MS initiates a data call
If automatic switch over is ON — 250
    If is High data rate is ON — 255
        Synch with PDC
        Switch MS to PDC
        Connect MS to PDCN → Call is ON
        MS disconnect data call
        Synch back with ASC
    Else — 260
        Use the low rate data of 1xRTT
        MS can use simultaneous data and voice
Else — 270
    Send SMS message, Would you like to use high or low data
    If high data rate is selected — 275
        Synch with PDC
        Switch MS to PDC
        Connect MS to PDCN → Call is ON
        MS disconnect data call
        Synch with ASC
    Else — 280
        Use the low rate data of 1xRTT
        MS can use simultaneous data and voice

Fig. 4

CLASS SUBCLASS
DRAFTSMAN

3.8 INCOMING DATA CALL WHILE ON VOICE

MS is on ASC
MS has IP address
PDCN notifies BSC of call 300
BSC notifies MSC of call via A- interface
MSC checks COS
If automatic switch over is ON 310
    Check Fundamental Data rate feature
        If is High data rate is ON 315
        Place caller on hold in the MSC
        Inform voice call of situation (RCAN)
        Call is still active in the BSC and MSC (Billing is ON)
            Synch with PDC
            Switch MS to PDC
            Connect MS to PDCN → Call is ON
            MS has control to switch back to voice call
            MS disconnect data call
            Synch with ASC
            Bring back voice call
        Else 320
            Use the low rate data of 1xRTT
            MS can use simultaneous data and voice
Else 325
    Send an SMS with incoming data call (Y/N) 330
    If MS accepts call
        Send SMS message, Would you like to use high or low data
        If high data rate is selected
        Place caller on hold in the MSC
        Inform voice call of situation (RCAN)
            Call is still active in the BSC
            and MSC-Billing On
                Synch with PDC
                Switch MS to PDC
                Connect MS to PDCN → Call is ON
                MS has control to switch back to voice
                call
                MS disconnect data call
                Synch with ASC
                Bring back voice call
            Else 335
                Use the low rate data of 1xRTT
                MS can use simultaneous data and voice
    Else
    Data call is not accepted 340

Fig. 5

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3.9 OUTGOING DATA CALL WHILE ON VOICE

MS is on ASC
MS has IP address
MS initiates a data call
If automatic switch over is ON (350)
    Check Fundamental Data rate feature (355)
    If is High data rate is ON
        Place caller on hold in the MSC
        Inform voice call of situation (RCAN)
        Call is still active in the BSC and MSC (Billing is ON)
        Synch with PDC
            Switch MS to PDC
            Connect MS to PDCN → Call is ON
            MS disconnect data call
            Synch back with ASC
            Bring back voice call
    Else (360)
        Use the low rate data of 1xRTT
        MS can use simultaneous data and voice
Else (365)
    Send SMS message, Would you like to use high or low data
    If high data rate is selected
        Place caller on hold in the MSC
        Inform voice call of situation (RCAN)
        Call is still active in the BSC and MSC-Billing On
        Synch with PDC
        Switch MS to PDC
        Connect MS to PDCN → Call is ON
        MS disconnect data call
        Synch with ASC
        Bring back voice call
    Else (370)
        Use the low rate data of 1xRTT
        MS can use simultaneous data and voice

Fig. 6

DRAFTSMAN

Fig. 7

3.12 INCOMING VOICE CALL WHILE ON DATA (HYBRID)

MS is on the PDC carrier
MSC get a voice call
Check COS for Voice Automatic Switch over
If feature is on block
  Block the call ~~~ 380
  Give RCAN
Else
If feature is ON ~~~ 390
  Check Supplemental Data rate feature
  If the High data rate is ON ~~~ 400
    Cannot accept the call
    Caller is informed with RCAN
  Else ~~~ 410
    Synch with ASC
    Continue the data call on lower data
    Accept the voice call
    Treat call as 1XRTT
Else ~~~ 420
  Send SMS to user, voice call is coming, accept call ?
  If caller accepts call
    Send SMS to user , "High data rate is no longer available"
    Synch with ASC
    Continue the data call on lower data
    Accept the voice call
    Treat call as 1XRTT
  Else
    Call is rejected ~~~ 430

Caller is informed with RCAN

Fig. 8 OUTGOING VOICE CALL WHILE ON DATA (HYBRID)

MS is on the PDC carrier
MS initiates a voice call
Send SMS to user " Are you sure, you will loose your high data rate ?" ~~~ 440
If the user accepts ~~~ 445
  Synch with ASC
  Continue the data call on lower data
  Make the voice call
  Treat call as 1XRTT call
Else
  Call is not placed ~~~ 450

3.1 POWER ON

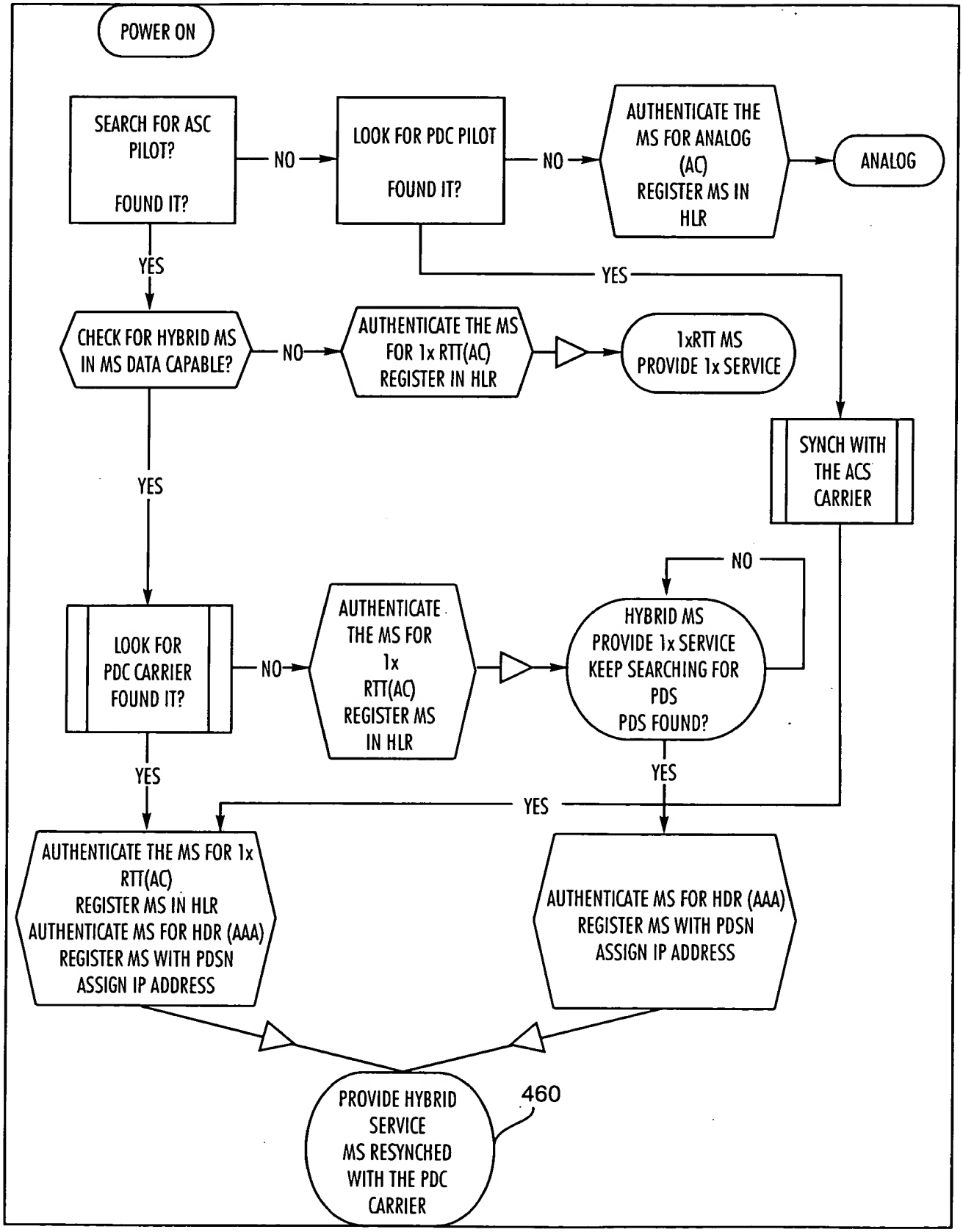

Fig. 9

3.4 INCOMING VOICE CALL IN THE IDLE STATE

MS is on PDC
MSC gets the call
MSC checks the COS for Automatic switch for voice call 470
If feature is ON
    MSC instructs the MS to search for the ASC
    MS finds the ASC and informs the MSC
    MS switches to ASC
    MSC sends that call to the MS → call is ON
    Call is complete (Release)
    MSC instructs the MS to synch back with the PDC 480
    MS is synched with PDC
Else
    MSC sends an SMS to the user telling him about the call
    If MS accepts the call
        MSC instructs the MS to search for the ASC
        MS finds the ASC and informs the MSC
        MS switches to ASC
        MSC sends that call to the MS → call is ON
        Call is complete (Release)
        MSC instructs the MS to synch back with the PDC 490
        MS is synched with PDC
    Else
        Call is rejected

Fig. 10

APPROVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

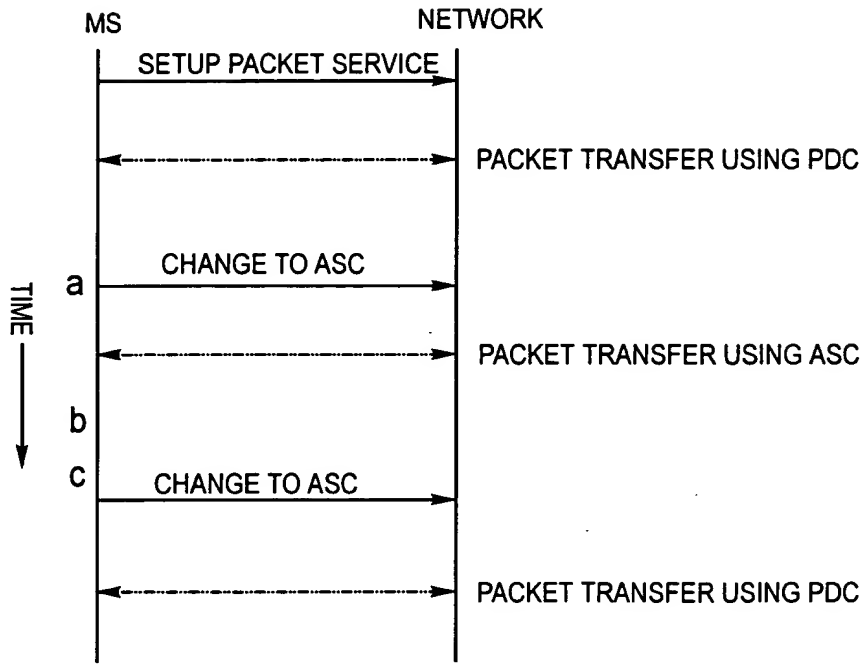

Fig. 11

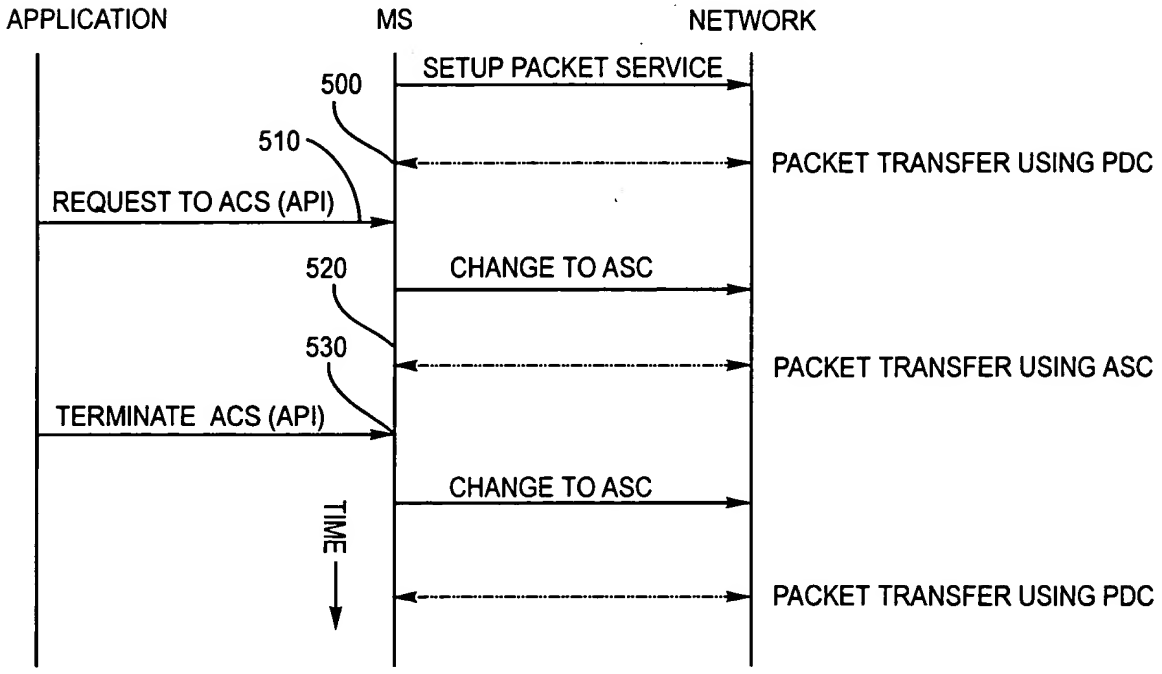

Fig. 12